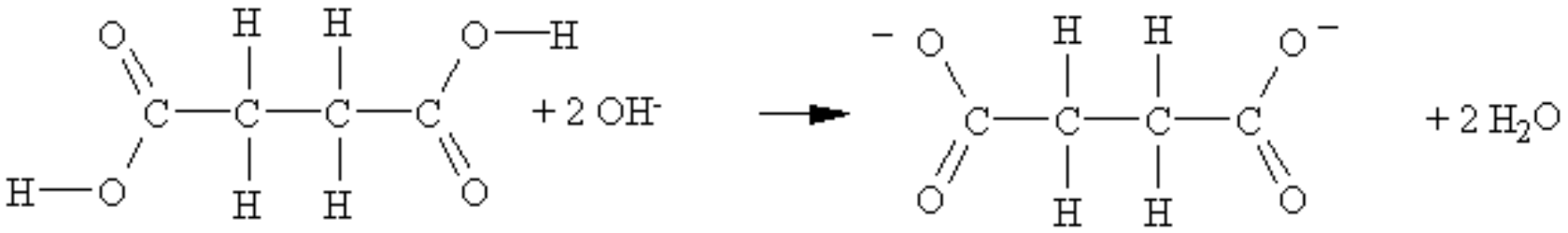
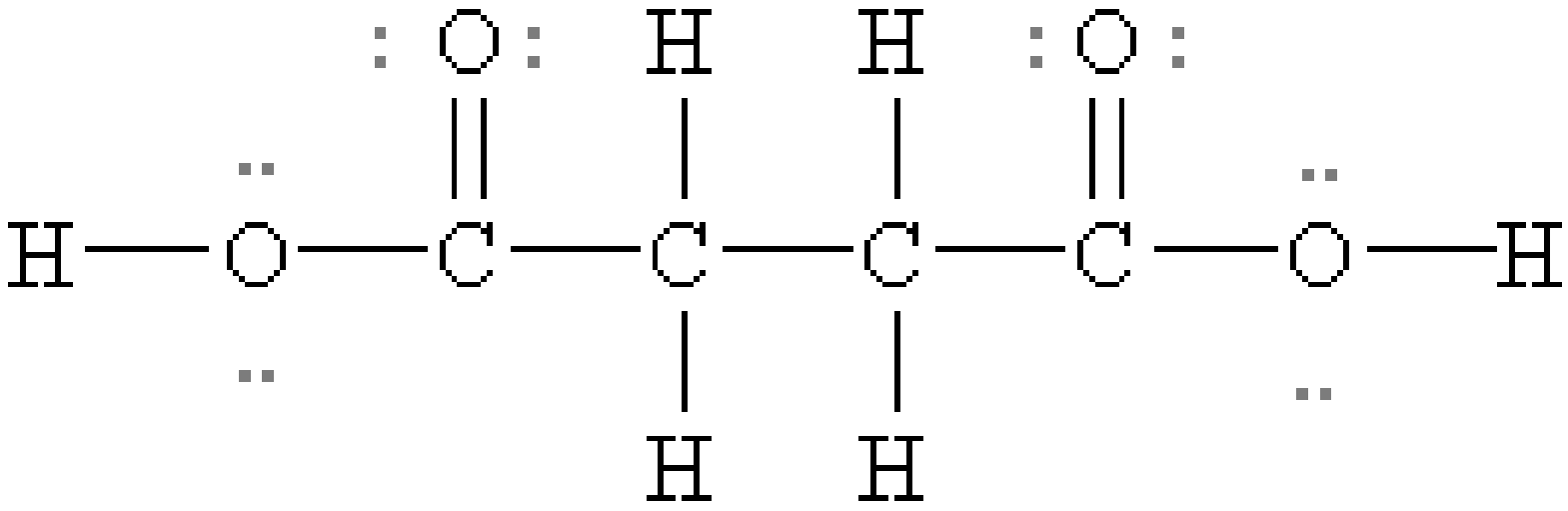
AP Chemistry Lab Experiment 29

Organic Chemistry and Some Functional Groups

1. a. Write a balanced net ionic equation for the reaction of butanedioic acid with sodium hydroxide



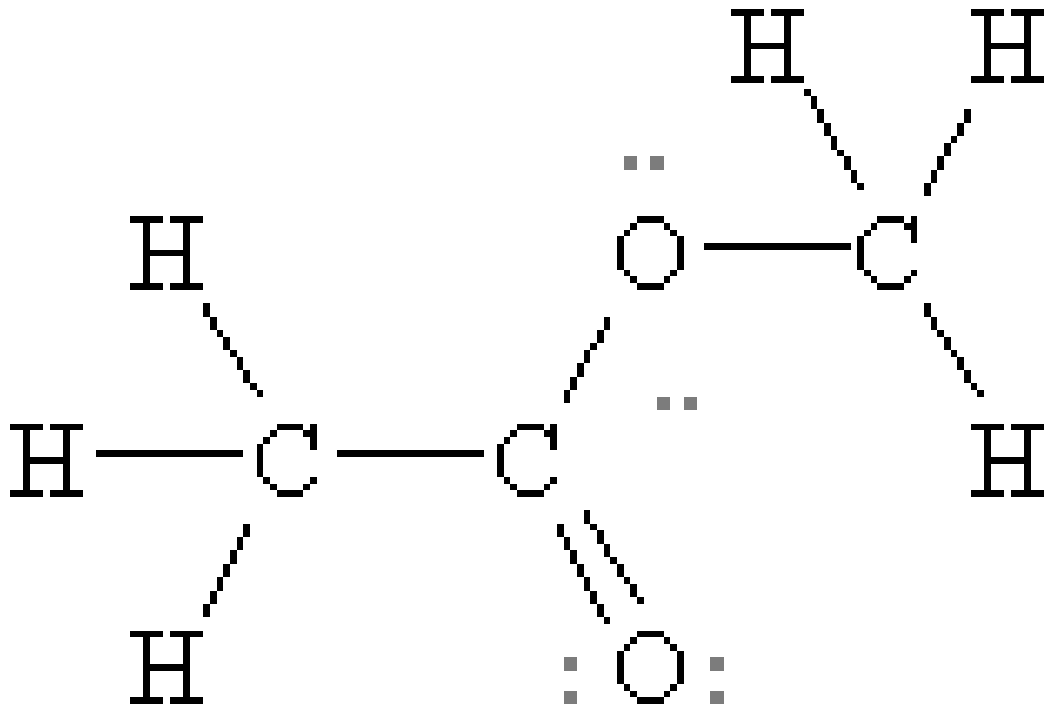
1. b. Draw the Lewis structure of butanedioic acid. (Show all valence electrons)



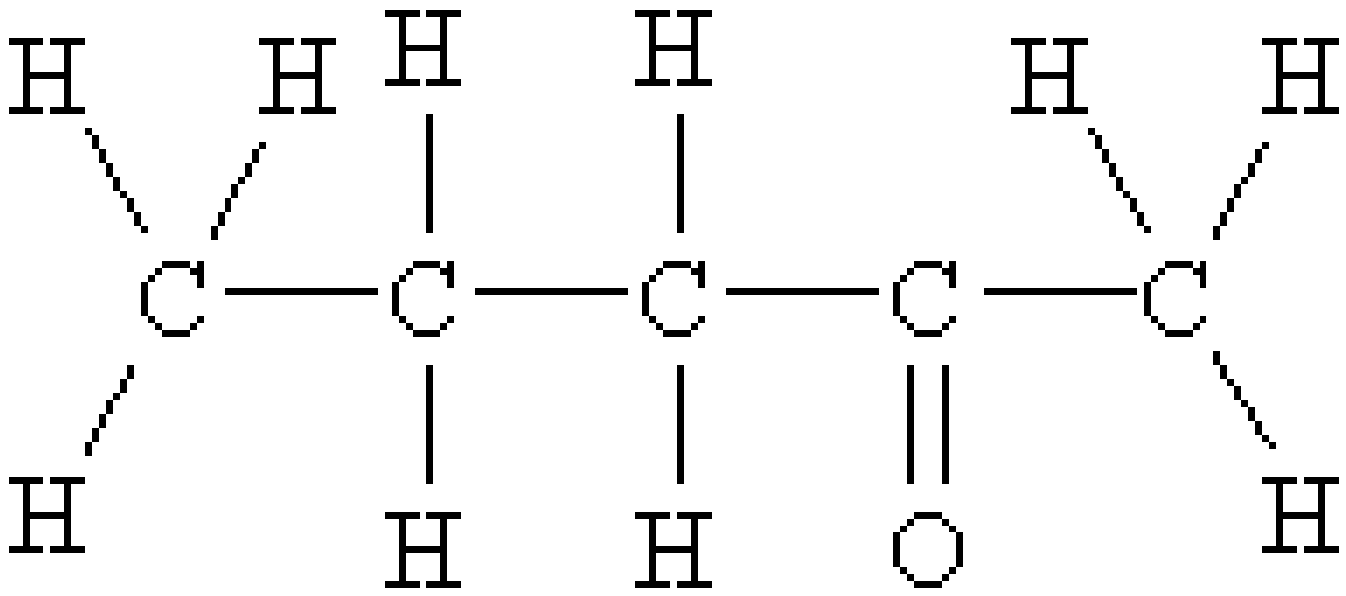
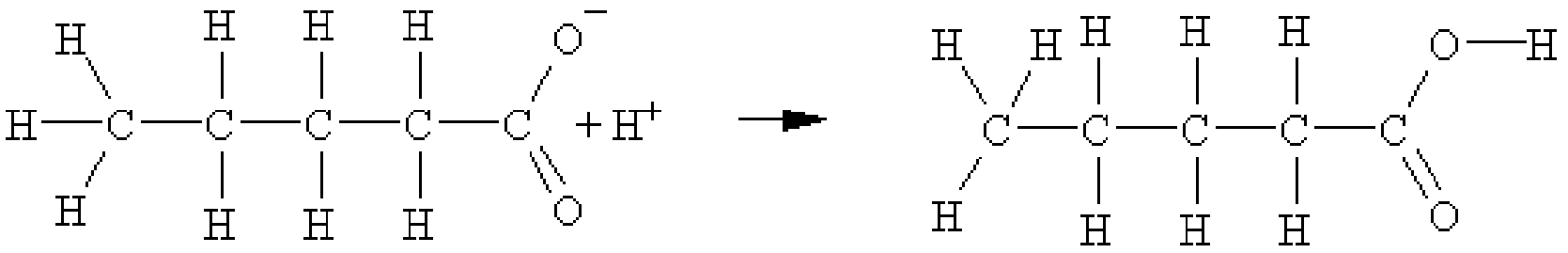
1. c. What is the functional group present in a molecule of this acid? How many of these functional groups are on each molecle?

The functional groups involved are (2) two carboxyl groups: R-COOH. They are the defining group in carboxylic (organic) acids.

2. Draw the Lewis structure of methyl acetate (show all valence electrons).



3. Draw the Lewis structure of methyl propyl ketone.



4. Write a balanced equation for the reaction of sodium pentonate with hydrochloric acid.